Y071-El Rev. No. 0

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4/13/93

FINAL DRAFT
EXPANDED SITE INSPECTION REPORT
SUFFOLK AIRPORT C&D SITE
SOUTHAMPTON, NEW YORK

VOLUME 1

PREPARED UNDER

WORK ASSIGNMENT NO. 019-2JZZ CONTRACT NO. 68-W9-0051

SEPTEMBER 30, 1992

SUBMITTED BY:

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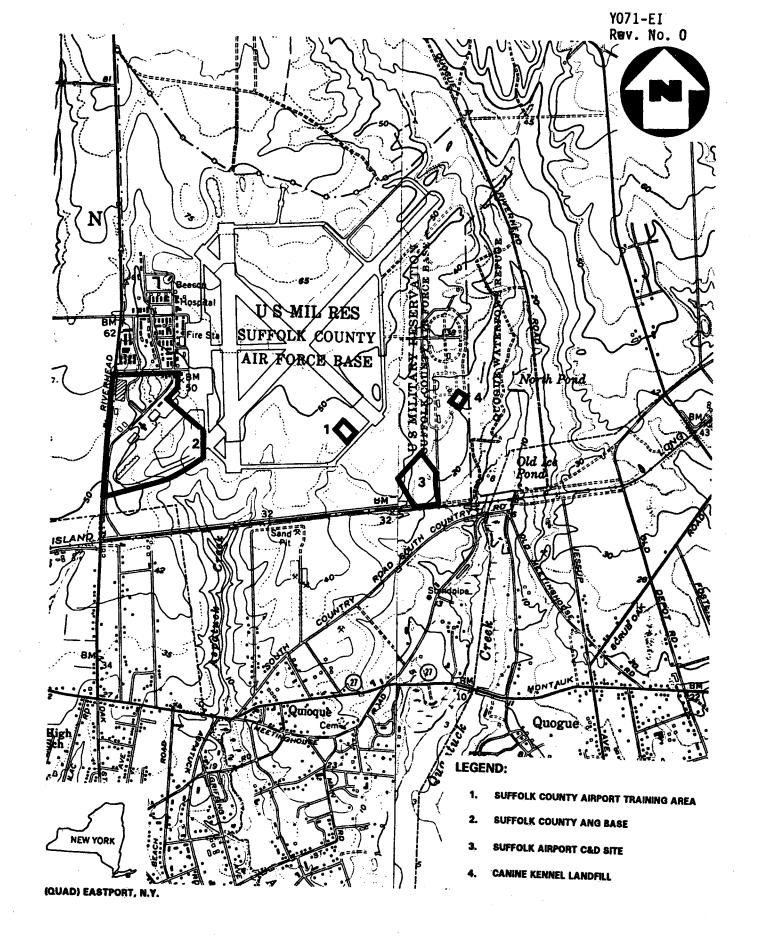
SITE SUMMARY

The Suffolk Airport C&D is actually an aggregate site consisting of the following four subsites, three of which are currently on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list: the Suffolk Airport C&D Site, CERCLIS I.D. No. NYD981186943, also known as the Runway Disposal Area; the Canine Kennel Landfill; the Suffolk County Airport Training Area, CERCLIS I.D. No. NYD986866432, also known as the Fire Training Area (FTA); and the Suffolk County ANG [Air National Guard] Base, CERCLIS I.D. No. NYD986927887. (Ref. No. 27). The site is located in the Town of Southampton bordering a rural, wooded area and a sparsely populated, coastal residential/resort area (Ref. No. 14). Figure 1 presents a Site Location Map. Less than 16,000 people live within 4 miles of the site, whose total area is approximately 80.5 acres (Ref. Nos. 8, 23-25, 30, 33, 44). The site is located on property owned by Suffolk County, which operates most of the property as the Suffolk County Airport (SCA). The airport was initially operated as the Westhampton Beach Army Airfield by the U.S. Army during World War II, and was deactivated in November 1945. From 1948 to 1951 the property was leased and operated by the Arabian American Oil Company. The base was reactivated and used by the U.S. Air Force (USAF) from 1951 until 1969. At that time the property was obtained by Suffolk County. Part of the property was leased from Suffolk County by the Air National Guard (ANG) in 1971 (Ref. No. 8, p. 1-1).

The Runway Disposal Area consists of an inactive open dump that was used by the USAF between 1951 and 1969, and by the SCA, the ANG, and other SCA lessees after 1970. Unauthorized disposal has also allegedly occurred. Drums and cans containing or formerly containing various materials, including solvents, resins, paints, and thinner have been observed. See Figure 2. Soil samples collected in 1991 confirmed the presence of solvents, metals, and pesticides (Ref. Nos. 28; 29; 31; 32, pp. 9-13).

The Canine Kennel Landfill consists of a small, inactive landfill used by the USAF during deactivation activities. See Figure 3. Leaking capacitors have been observed at the site, and soil samples collected in 1992 were found to contain polychlorinated biphenyls (PCBs) (Ref. Nos. 29; 33; 34; 38, p T-10).

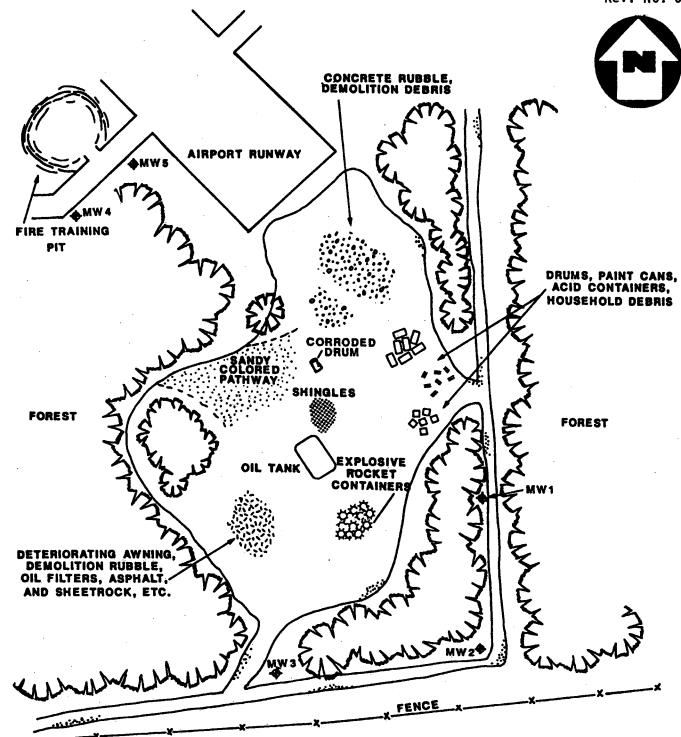
The Fire Training Area consists of a burn pit used prior to 1971 to burn oils, solvents, and fuels for fire training exercises. See Figure 4. After 1971, the ANG burned only jet fuel there. A concrete curb was not installed around the asphalt-lined burn area until 1978. ANG personnel have alleged that



SITE LOCATION MAP
SUFFOLK AIRPORT C&D SITE
SOUTHAMPTON, N.Y.

FIGURE 1

SCALE: 1" = 2000'

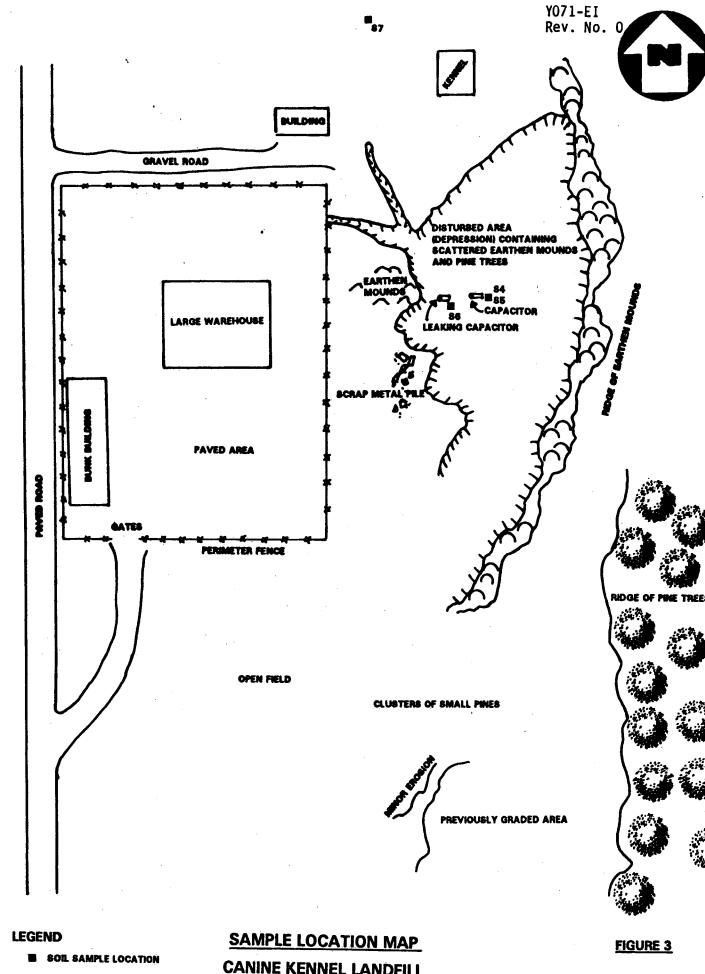


SITE MAP
SUFFOLK AIRPORT C & D SITE,
WESTHAMPTON BEACH, N.Y.

NOT TO SCALE

FIGURE 2:

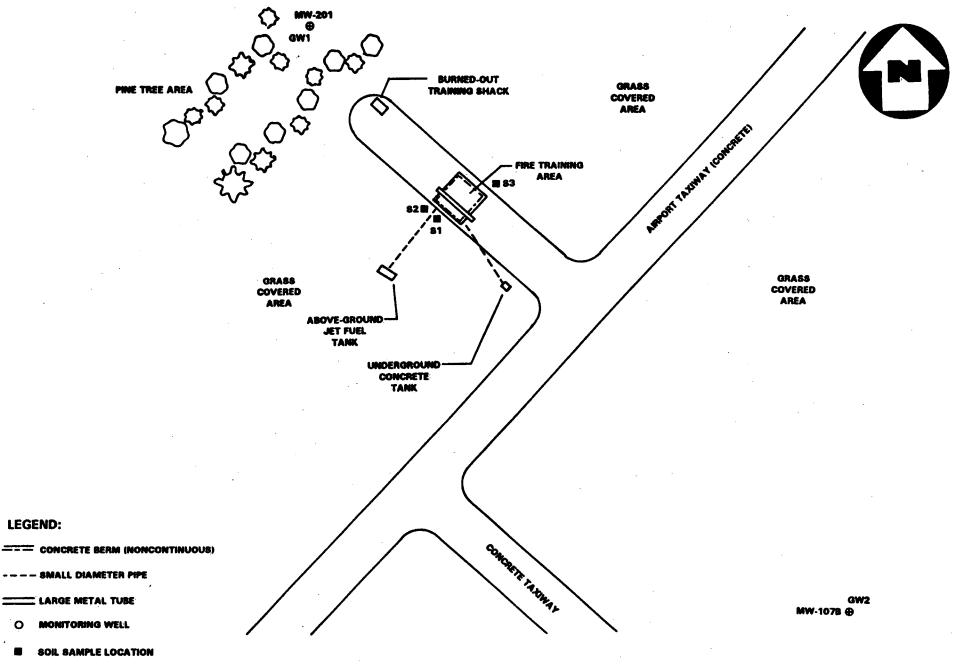




CANINE KENNEL LANDFILL SOUTHAMPTON, NEW YORK

NOTE: ALL SAMPLE NUMBERS PRECEDED BY YO71.

(NOT TO SCALE)



NOTE: ALL SAMPLE NUMBERS PRECEDED BY YO71-.

GROUNDWATER SAMPLE LOCATION

LEGEND:

SAMPLE LOCATION MAP SUFFOLK COUNTY AIRPORT TRAINING AREA SOUTHAMPTON, N.Y.

APPROXIMATE SCALE: 1" = 150"

FIGURE 4

SITE SUMMARY (CONT'D)

unauthorized dumping of waste liquids by unknown persons has also occurred. Analyses of surface and subsurface soil and groundwater samples collected during 1987-1989 have revealed the presence of solvents (Ref. Nos. 8, pp. 3-4, 3-8, 5-8, 5-11, 5-30, 6-10, 6-12, 6-13, I-1; 35).

The ANG base contains three other waste sources, namely the septic tank/cesspool systems, and the former and current hazardous waste storage facilities. See Figure 5. The septic tank/cesspool systems were used for the disposal of various shop wastes, including acids, solvents, and other waste liquids. The combined capacity of the systems is at least 105,000 gallons. Some cesspools were constructed of perforated concrete and/or were open to the soil at the bottom. Sludge and liquid samples were found to contain various solvents and other volatile organic contaminants. (Ref. Nos. 10, p. 2-2, Table 2; 29, pp. AD-7, AD-14 to AD-16, AD-19; 41, p. 2-5). The former hazardous waste storage facility consists of an outdoor drum storage area where shop wastes of unknown composition were stored prior to 1984. No containment structures are known to have been used, and surface soil contamination was reportedly evident during a 1991 inspection (Ref. No. 41, pp. 2-1, 2-4, 3-2). The current hazardous waste storage facility consists of a small building used to store drummed solvents and strippers between 1984 and 1989. The building was in a state of disrepair, with a gravel floor that was reportedly discolored (Ref. No. 41, pp. 2-3, 2-4, 3-2, 3-3).

Based on the above, there is a very high potential for a release of contaminants to groundwater. Over 50,000 people obtain drinking water from public supply wells located within 4 miles of the site (Ref. No. 15). The public supply wells draw from a highly permeable, surficial sand and gravel aquifer, and wastes were deposited less than 6 feet above the water table (Ref. Nos. 6; 7; 8, p. 6-7; 13). The site is also within the boundaries of two terrestrial sensitive environments (unique biotic communities). (Ref. Nos. 3; 8, pp. 3-5, A-1-1, A-1-2).

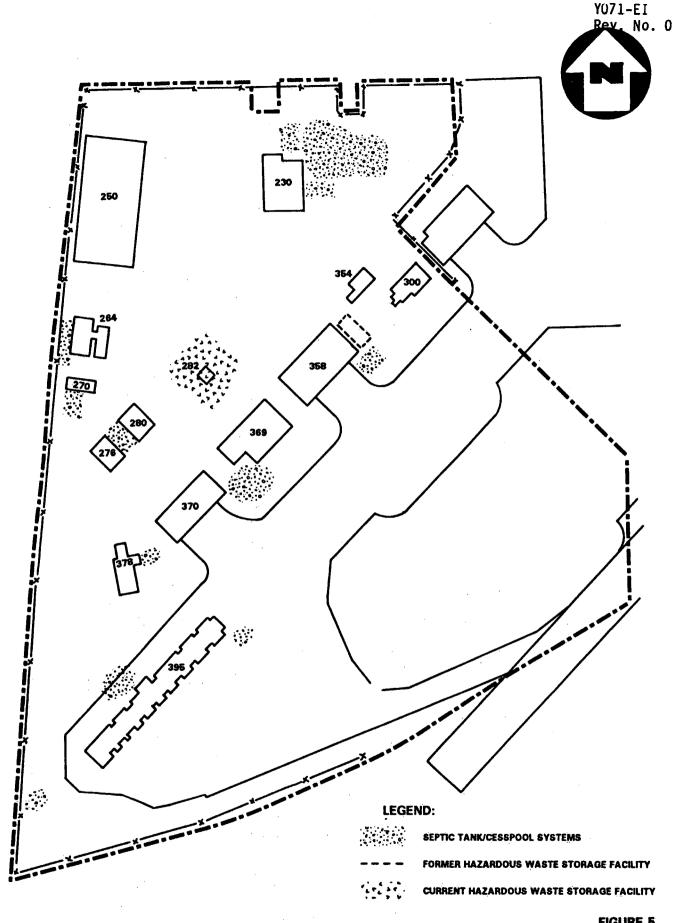


FIGURE 5

SITE MAP **SUFFOLK COUNTY ANG BASE** SOUTHAMPTON, N.Y.

(SCALE UNKNOWN)

SITE ASSESSMENT REPORT: SITE INSPECTION

_ Inactive

x Active

PART	i: SITE IN	FORMATION		
1.		Suffolk Airport C&D Site/Suff ANG Base/Canine Kennel Land		raining Area/
		nead Road		
	City Southampto	<u>on</u>	State New York	Zip <u>11978</u>
2.	County Suffolk		County Cod	e <u>103</u> Cong.Dist. <u>1</u>
3.		Site: NYD981186947/Traini /Kennel Landfill: Not Applical		
4.	Block No. <u>01.00</u>		Lot No. <u>001.000</u>	
5.	Latitude 40° 50'	00" to 40° 50′ 26"	_ Longitude <u>72° 37′ 1</u>	2" to 72° 38′ 47"
	USGS Quad. Eas	stport, NY; Quogue, NY	-	
6.	Owner Suffolk C	County	_ Tel. No. <u>(516) 282</u> -	1600
	Street Yaphank	Avenue		
	City Yaphank	· · · · · · · · · · · · · · · · · · ·	State New York	Zip <u>11980</u>
7.		County Department of National Guard	_ Te l. No. <u>(516)</u> 852- _	4000/(516) 475-2483
	Street Old River	head Road		
	City Southampto	on	State New York	Zip <u>11978</u>
8.	Type of Owners	hip		
	_ Private	_ Federal	_ State	
	x County	_ Municipal	_ Unknown	_ Other
9.	Owner/Operator	Notification on File	- -	
	_ RCRA 3001 [Date	_ CERCLA 103c	Date
	_ None	<u>x</u> Unknown		
10.	Permit Informati	on		
	Permit	Permit No. Date Issued	Expiration Date	Comments
	Not Applicable			
11.	Site Status			

- 12. Years of Operation 1943 to Present
- 13. Identify the types of waste sources (e.g., landfill, surface impoundment, piles, stained soil, above- or below-ground tanks or containers, land treatment, etc.) on site. Initiate as many waste unit numbers as needed to identify all waste sources on site.
 - (a) Waste Sources

Waste Unit No.	Waste Source Type	Facility Name for Unit
1.	Open Dump	Runway Disposal Area
2.	Landfill	Canine Kennel Landfill
3.	Burn Pit	Fire Training Area
4.	Below-ground tanks/containers	Septic Tank/Cesspool Systems
5.	Drums	Former Hazardous Waste Storage
		<u>Facility</u>
6.	Drums	Current Hazardous Waste
		Storage Facility

(b) Other Areas of Concern

Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

A below-ground concrete tank is present at the Fire Training Area, south of the burn pit. It was designed to received unburned fuel after fire training excercises, but it reportedly was never used. Northwest of the burn pit is an area next to a trailer where other fire training excercises were held. It is unknown how the trailer fires were ignited.

Ref. Nos. 1; 8, pp. 3-7, 3-8; 14; 27; 28

14. Information available from

Contact Sandy Foose Agency U.S. EPA Tel. No. (908) 906-6808

Preparer Thomas A. Varner

Date September 30, 1992

PART II: WASTE SOURCE INFORMATION

For eac	For each of the waste units identified in Part I, complete the following items.							
Waste Unit1		•	Runwa	ay Disposal Area				
Source	Туре							
_	Landfill			Contaminated Soil				
	Surface Impoundment		-	Pile (Specify type: chemical, junk trash, tailing, etc.)				
-	Drums		_	Land Treatment				
_	Tanks/Containers		<u>x</u>	Other (Open Dump)				

Description:

This waste source, known as the Suffolk Airport C&D Site in CERCLIS, consists of an inactive open dump located in the southeast corner of the airport. The United States Air Force owned and operated the airport property and used this disposal area between 1951 and 1969. Air Force operations were deactivated in 1970 and the property acquired by Suffolk County, which operated it as the Suffolk County Airport (SCA). In 1971, the Air National Guard (ANG) leased approximately 70 acres of airport property, and contributed to this waste source along with the SCA and other SCA lessees, from 1971 to 1982. SCA and the ANG allegedly disposed primarily of construction debris and other bulk wastes such as bricks and steel. Unauthorized disposal has also allegedly occurred.

In 1984, the New York State Department of Environmental Conservation (NYSDEC) inspected the dump and found spent oil filters, empty oil and solvent cans, and 55-gallon drums. A member of a citizens' group also alleged that the site received waste chemicals and oil, jet fuel pods, munitions, and old transformers containing liquid contaminated with polychlorinated biphenyls (PCBs). She also allegedly excavated drums of "Primotab" and "sodium sulfide". During a subsequent inspection by a NYSDEC contractor, paint cans, 5-gallon containers labeled "coating compound" that reportedly contained acid, and several 55-gallon drums leaking a paint-like substance were observed. In June 1987, approximately four full, 5-gallon cans of metal coating resins and 20 empty, rusted 5-gallon cans that formerly contained aliphatic thinner were observed on site. In February 1991, a contractor to the U.S. EPA observed stained soils, rocket containers, paint cans, acid containers, and drums, including one leaking a dark, black resin. Wastes (of unknown composition) are also allegedly buried at the site.

Hazardous Waste Quantity

The total quantity of material containing hazardous substances deposited in this waste source cannot be determined based on available information. This waste source covers approximately 10 acres.

Hazardous Substances/Physical State

Liquid and solid waste was deposited in this waste source. Soil samples collected during the February 1991 inspection were found to contain toluene, ethylbenzene, xylenes, diethylphthalate, di-n-butylphthalate, butylbenzylphthalate, heptachlor epoxide, 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT. One soil sample contained aluminum, cadmium, copper, iron, and lead at levels ranging from more than 3 times to more than 50 times higher than their next highest respective levels found during this sampling event.

Ref. Nos. 11, p. 2-1; 27-31; 32, pp. 9-13

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following items.

Waste Unit 2 - Canine Kennel Landfill

Source Type

X Landfill _ Contaminated Soil

Surface Impoundment _ Pile (Specify type: chemical, junk trash, tailing, etc.)

Drums _ Land Treatment

Description:

This waste source, which is not listed in CERCLIS, consists of an inactive landfill, 0.5 to 1 acre in size, that was used by the U.S. Air Force during deactivation activities conducted in 1969 and 1970 for burial of allegedly inert wastes. Reportedly, neither the SCA nor the ANG contributed to this waste source. However, partially-buried capacitors and drums were discovered by the NYSDEC in 1984. The origin of these wastes is unknown. The capacitors were leaking oil and the odor of PCB carrier gas was reportedly present. Surface soil samples collected at that time were allegedly found to contain PCBs as high as 1,700 parts per million (ppm). An inspection conducted by a NYSDEC contractor in January 1986 noted that the capacitors and drums were no longer present, indicated that they may have been buried or removed. An inspection conducted in July 1992 by a contractor to the U.S. EPA, however, found that exposed capacitors were still present at the site, and collected soil samples proximate to their locations.

Other

Hazardous Waste Quantity

Tanks/Containers

The total quantity of material containing hazardous substances deposited in this waste source cannot be determined based on available information. This waste source covers between 0.5 and 1 acre.

Hazardous Substances/Physical State

The capacitors in this waste source contain contaminated liquid. Soil samples collected near two capacitors during the July 1992 inspection were found to contain Aroclor-1254 (a PCB) at estimated levels of 9,700 micrograms per kilogram (ug/kg) and 6,000,000 ug/kg, respectively. The same contaminant was detected in the background sample at an estimated concentration of 51 ug/kg.

Ref. Nos. 27; 29; 33; 34; 38, p. T-10

PART II: WASTE SOURCE INFORMATION

For eac	For each of the waste units identified in Part I, complete the following items.							
Waste Unit3		· -	Fire Train	ing Area (FTA)				
Source	Туре							
_	Landfill		-	Contaminated Soil				
	Surface Impoundment		. -	Pile (Specify type: chemical, junk trash, tailing, etc.)				
_	Drums		_	Land Treatment				
_	Tanks/Containers		<u>x</u>	Other (Burn Pit)				

Description:

This waste source, known in CERCLIS as the Suffolk County Airport Training Area, consists of an asphalt-lined burn pit measuring 50 feet by 50 feet. A concrete curb meant to act as a containment structure exists, but does not form a continuous barrier. The curb was not installed until 1978. Aerial photographs from 1961 indicate that areas immediately northeast and southwest of the burn pit may have been impacted by training activities conducted there. An "old" training area may have been located near the taxiway just southeast of the burn pit.

Prior to 1971, waste oils, solvents, and fuels were collected from storage tanks located around the base and brought to the FTA, which were then poured on the ground in the burn pit, ignited, and extinguished during the training exercise. Solvents burned reportedly included kerosene, mineral spirits, trichloroethene, 2-butanone, and toluene. After 1971, when the ANG moved to the base, only JP-4 jet fuel was used for burning. However, ANG personnel have alleged that the FTA may have been used for disposal of waste liquids by unknown persons between training excercises. Burning at the FTA was discontinued by the ANG in August 1986.

Hazardous Waste Quantity

Hazardous substances associated with this waste source, based on historical data, include trichloroethene, 2-butanone, and toluene.

Hazardous Substances/Physical State

Analysis of surface and subsurface soil samples collected in 1987 indicates the presence of xylenes, benzene, ethylbenzene, tetrachloroethene, toluene, and chlorobenzene. Benzene, toluene, and xylenes were also found in groundwater immediately downgradient of the burn pit (in monitoring well No. 103) but were not detected in upgradient monitoring wells (Nos. 101A, 101B) in April 1987. Toluene and xylenes were found again in July 1987 in monitoring well No. 103 but not in monitoring well Nos.

101A or 101B. Finally, in December 1989, benzene, toluene, ethylbenzene, and xylenes were detected in monitoring well No. 103 but not in upgradient monitoring well Nos. 101A, 101B, 201, 202, 203, and 204. Also, although 2-butanone was detected in monitoring wells on many occasions in various monitoring wells, detailed study has raised significant questions concerning its origin and has demonstrated that it was present in decontamination fluids used during several sampling events. Wastes burned in this waste source were in a liquid state.

Ref. Nos. 8, pp. 2-1, 2-2, 3-4, 3-7, 3-8, 5-2, 5-8, 5-9, 5-11, 5-30, 6-10, 6-12, 6-13, I-1; 27; 34-37; 42

PART II: WASTE SOURC		RCE INFO	RMATION				
For eacl	n of the wa	ste units id	dentified i	in Part I, comp	plete the following items.		
Waste Unit4 -				Septic Tank/Cesspool Systems			
Source	Туре						
- .	Landfill			-	Contaminated Soil		
-	Surface Imp	poundment	t	-	Pile (Specify type: chemical, junk trash, tailing, etc.)		
_	Drums			-	Land Treatment		
X	Tanks/Cont	tainers			Other		

Description:

This waste source, located at the ANG portion of the site (known as the Suffolk County ANG Base in CERCLIS), consists of 8 septic tanks, 34 cesspools, 2 dry wells, and an oil and mud trap scattered across the ANG property. The system received wastestreams from industrial and/or equipment maintenance. Waste battery acids generated by the electrical shop from lead-acid batteries are known to have been disposed of in one of the tank systems. Solvents, including a material called PD-680, were previously descarded by the pneudraulics shop down a drain thought to discharge into a nearby cesspool. An alkaline wash solution used by the corrosion control shop was also disposed of in the drainage system. Prior to 1978, hypo-fixer solution from the photographic laboratory was disposed of in one of the cesspools. Silver was one of the solution constituents. The following materials, which were allegedly collected and disposed of off site, were also generated at the ANG base and potentially may also have been disposed of in this waste source: paints, primers, thinners, and paint removers; solvents including 2-butanone (methyl ethyl ketone), trichloroethene, stoddard solvent, and "cleaning compound"; and resins, lubricants, adhesives, epoxies, lacquers, hydraulic fluids, and herbicides. Specific hazardous substances associated with some of these materials are not documented. The cesspools, some of which were constructed of perforated concrete, appeared to be open to the soil at their bottoms, but this was not confirmed at all locations.

Hazardous Waste Quantity

The total quantity of material containing hazardous substances deposited in this waste source cannot be determined based on available information. The combined capacity of all tanks and cesspools is at least 105,000 gallons.

Hazardous Substances/Physical State

Sludge and liquid were observed in this waste source during a field screening conducted in August 1991. Samples collected during this investigation were analyzed and found to contain numerous VOCs, including 1,1,1-trichloroethane, trichloroethene, tetrachloroethene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, benzene, toluene, ethylbenzene, and xylenes. Levels of these substances were found to be as high as 1,600,000 parts per billion (ppb) in sludge and 2,200 ppb in liquids. A solution containing silver was also disposed of in this waste source.

Ref. Nos. 10, pp. 2-2 to 2-5, 3-1, Table 2; 29, pp. AD-7 to AD-10, AD-14 to AD-16, AD-19; 41, pp. 2-1, 2-3 to 2-6

For each of the waste units identified in Part I, complete the following items.

Waste Unit 5 _____ Former Hazardous Waste Storage Facility

Source Type ____ Landfill ____ Contaminated Soil ____ Pile (Specify type: chemical, junk trash, tailing, etc.)

X Drums ____ Land Treatment

Description:

This waste source consists of a drum storage area formerly located near the northeastern portion of ANG building No. 358, where shop wastes of unknown composition were stored prior to 1984. The area is mostly grass-covered, but parts are covered with asphalt or concrete. There are no other containment structures associated with this waste source. It is reported that wastes were stored next to the building and the adjacent loading dock; surface soil contamination was reportedly evident there during an inspection conducted in August 1991. Wastes generated by the various ANG shops include paints, primers, thinners, and paint removers; solvents including 2-butanone (methyl ethyl ketone), trichloroethene, stoddard solvent, and "cleaning compound"; and resins, lubricants, adhesives, expoxies, lacquers, hydraulic fluids, and herbicides.

Other

Hazardous Waste Quantity

Tanks/Containers

The size of this waste source is less than 1,000 square feet in area.

Hazardous Substances/Physical State

Liquids of unknown composition were stored in drums in this area.

Ref. No. 41, pp. 2-1, 2-4, 3-2

PART	PART II: WASTE SOURCE INFORMATION						
For each of the waste units identified in Part I, complete the following items.							
Waste Unit6		- Current H	Current Hazardous Waste Storage Facility				
Source	Туре						
-	Landfill	_	Contaminated Soil				
-	Surface Impoundment	-	Pile (Specify type: chemical, junk trash, tailing, etc.)				
X	Drums	. · ·	Land Treatment				
-	Tanks/Containers	. · ·	Other				

Description:

The waste source consists of the former ANG building No. 282, which was used to store shop wastes such as drummed solvents and strippers, between 1984 and 1989. Building No. 282 was reportedly a small building in a state of disrepair, with numerous holes in the roof, no doors or windows, and an open gravel floor. Although no spills were recorded at this storage area, discolored gravel and soil have been observed throughout the facility.

Hazardous Waste Quantity

The total quantity of material containing hazardous substances associated with this waste source is unknown. It's size is also unknown.

Hazardous Substances/Physical State

Liquid wastes were stored in this facility.

Ref. Nos. 41, pp. 2-3, 2-4, 3-2, 3-3

PART III:

SAMPLING RESULTS

EXISTING ANALYTICAL DATA

1. Runway Disposal Area

Soil samples were collected by a contractor to the U.S. Environmental Protection Agency in February 1991. These samples were analyzed by Contract Laboratory Program (CLP) laboratories for Target Compound List volatile and semivolatile organic compounds, pesticides, PCBs, and metals. Table 1 presents selected results.

TABLE 1: SELECTED SOIL SAMPLING RESULTS RUNWAY DISPOSAL AREA FEBRUARY 1991

Substance	Concentration	Substance	Concentration
Toluene	630 ug/kg	4,4'-DDE	85 ug/kg
Ethylbenzene	120 ug/kg	4,4'-DDD	38 ug/kg
Xylenes	960 ug/kg	4,4'-DDT	420 ug/kg
Diethylphthalate	37,000 ug/kg	Aluminum	20,500 mg/kg
Di-n-butylphthalate	8,000 ug/kg	Cadmium	93.3 mg/kg
Butyl benzyl phthalate	20,000 ug/kg	Copper	855 mg/kg
Heptachlor epoxide	10 ug/kg	Lead	2,980 mg/kg

Ref. No. 32, pp. 1-13

2. Fire Training Area

E.C. Jordan collected soil and groundwater samples at this waste source in 1987 and analyzed by CompuChem Laboratories, Inc. for Hazardous Substance List compounds using U.S. EPA CLP procedures. Tables 2 and 3 present selected results. In December 1989, groundwater samples were collected by the NYSDEC and analyzed by Versar, Inc. Table 4 presents selected results. The data indicate that a very high potential for a release to groundwater exists. However, they can not be used to document an observed release because supporting quality assurance/quality control data are not currently available.

TABLE 2: SELECTED SOIL SAMPLING RESULTS FIRE TRAINING AREA 1987

Substance	Surface Soil	Subsurface Soil		
Xylenes	0.091	2.8		
Benzene	0.009	ND		
Ethylbenzene	0.008	0.1		
Tetrachloroethene	ND	0.037		
Toluene	0.13	0.092		
Chlorobenzene	0.02	ND		

ND - Not Detected All results are in ppm

Ref. No. 8, pp. 5-2, 5-8, 5-9, 5-11, 5-30

TABLE 3: SELECTED GROUNDWATER SAMPLING RESULTS
FIRE TRAINING AREA
1987

		nd 1 adient Level	Ro	Detection Limit	
Substance	No. 103	No. 107B	Upgradient Level No. 101A No. 101B		
Benzene	13	ND	ND	NĐ	5
Toluene	36	ND	ND	ND	5
Xylenes	34	ND	ND	ND	5
2-Butanone	ND	56,000	28	ND	10
Bis (2-ethylhexyl) phthalate	ND	52	37	ND	10

ND - Not Detected All results in ppb

Ref. No. 8, pp. 6-8, 6-10, 6-12,6-13, I-1, I-4

TABLE 4: SELECTED GROUNDWATER SAMPING RESULTS FIRE TRAINING AREA DECEMBER 1989

	Downgradient Level			Upgradi	ent Level			Detection
Substance	<u>No. 103</u>	No. 101A	No. 101B	No. 201	No. 202	No. 203	No.204	<u>Limit</u>
Benzene	5	ND	ND	ND	ND	ND	ND	5
Toluene	34	ND	ND	ND	ND	ND	ND	5
Ethylbenzene	10	ND	ND	ND	ND	ND	ND	5
Xylenes	68	ND	ND	ND	ND	ND	ND	5

ND -Not Detected All results in ug/L

Ref. Nos. 36, Table 4; 37; 42

3. Septic Tank/Cesspool Systems

In 1991, ABB Environmental Services, Inc. collected sludge and/or liquid samples from various parts of this subsurface disposal system, which were analyzed on site using U.S. EPA methods. Samples were also sent to a laboratory for confirmatory analysis. Table 5 presents selected results.

TABLE 5: SELECTED SEPTIC TANK/CESSPOOL SAMPLING RESULTS
1991

SUBSTANCE	SLUDGE LEVEL	LIQUID LEVEL
1,1,1-Trichloroethene	1,600,000	1,700
Trichloroethene	250,000	37
Tetrachloroethene	2,100	23
Chlorobenzene	240,000	6
1,2-Dichlorobenzene	140,000	73
1,3-Dichlorobenzene	13,000	18
1,4-Dichlorobenzene	1,600,000	2,200
Benzene	31,000	ND
Toluene	630,000	120
Ethylbenzene	37,000	12
m/p-Xylenes	52,000	30
o-Xylene	32,000	130

ND - Not Detected All results in ppb

Ref. No. 10, pp. 2-2 to 2-4, Table 2

EXPANDED SITE INSPECTION RESULTS

An Expanded Site Inspection was conducted at the site on July 15-16, 1992, during which a total of 2 groundwater, 7 soil, 4 surface water, and 3 sediment samples were collected. All samples were analyzed by U.S. EPA CLP laboratories for Target Compound List substances. Table 6 presents a summary of the results, and Figures 3, 4, and 6 provide Sample Location Maps.

Ref. Nos. 34, 38

VOLATILES Sample ID No. Traffic Report No. Matrix Units Dilution Factor Percent Moisture	Y071-GW1 BKF41 AQUEOUS UG/L 1.0	Y071-GW2 BKF42 AQUEOUS UG/L 1.0	Y071-S1 BKF56 S0IL UG/KG 1.0 2	Y071-S2 BKF57 S0IL UG/KG 1.0 2	Y071-S3 BKF58 S0IL UG/KG 1.0	Y071-S4 BKF59 SOIL UG/KG 1.0 5	Y071-S5 BKF60 SOIL UG/KG 1.0 5	Y071-S BKF61 S01L UG/KG 1.0 8
Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,1-Dichloroethane	2) ·						·
1,2-Dichloroethene (total) Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropane cis-1,3-Dichloropropene Trichloroethene			2 J		· 1 J		_ 1 J	;
Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone								
Tetrachloroethene Toluene 1,1,2,2-Tetrachloroethane Chlorobenzene Ethylbenzene						•		

NOTES:
Blank space - compound analyzed for but not detected
B - compound found in lab blank as well as sample, indicates possible/probable blank contamination
E - estimated value
J - estimated value, compound present below CRQL but above IDL
R - analysis did not pass EPA QA/QC
N - Presumptive evidence of the presence of the material
NR - analysis not required
Detection limits elevated if Dilution
Factor >1 and/or percent moisture >0%

Styrene Xylenes (Total)

Factor >1 and/or percent moisture >0%

Y071-S7

BKF62 SOIL UG/KG 1.0

8

1 J

2 J

Y071-SW1 BKF49 AQUEOUS UG/L

1.0

4 J

SITE NAME: SUFFOLK AIRPORT C & D SITE PROJECT#: Y071 SAMPLING DATE: JULY 15-16, 1992 EPA CASE NO.: 18463 LAB: COMPUCHEM LABO

VOLATILES
Sample ID No.
Traffic Report No.
Matrix
Units
Dilution Factor
Percent Moisture
Chloromethane
Bromomethane
Vinyl Chloride
Chloroethane
Methylene Chloride
Acetone
Carbon Disulfide
1.1-Dichloroethene
1,1-Dichloroethane
1,2-Dichloroethene (total)
Chloroform
1.2-Dichloroethane
2-Butanone
1,1,1-Trichloroethane
Carbon Tetrachloride
Bromodichloromethane
1,2-Dichloropropane
cis-1,3-Dichloropropene
Trichloroethene
Dibromochloromethane
1,1,2-Trichloroethane
Benzene
trans-1,3-Dichloropropene
Bromoform
4-Methyl-2-Pentanone
2-Hexanone
Tetrachloroethene
Toluene
1,1,2,2-Tetrachloroethane
Chlorobenzene
Ethylbenzene
Styrene
Xylenes (Total)
• (•) (•)

NOTES:
Blank space - compound analyzed for but
not detected B - compound found in lab blank as well as
sample, indicates possible/probable
blank contamination
E - estimated value
J - estimated value, compound present
below CRQL but above IDL
poron bude above the

NR - analysis did not pass EPA QA/QC N - Presumptive evidence of the presence of the material NR - analysis not required Detection limits elevated if Dilution Factor >1 and/or percent moisture >0%

Y071-SW2 BKF50 AQUEOUS UG/L 1.0	Y071-SW3 BKF51 AQUEOUS UG/L 1.0	Y071-SW4 BKF52 AQUEOUS UG/L 1.0	Y071-SED1 BKF53 S0IL UG/KG 1.0 6	Y071-SED2 BKF54 SOIL UG/KG 1.0 7	Y071-SED3 BKF55 S0IL UG/KG 1.0 8	Y071-RIN4 BKF77 AQUEOUS UG/L 1.0	Y071-RIN5 BKF43 AQUEOUS UG/L 1.0	Y071-RIN6 BKF44 AQUEOUS UG/L 1.0	Y071-TBLK1 BKF78 AQUEOUS UG/L 1.0
					*****	71 E	1200 E	39 E	1200 E
5 J	²2 J	39 J				4 J 14 E	10 13 E	6 J	1 J
•							2 J		2 J

PROJECT#: Y071 SAMPLING DATE: JULY 15-16, 1992 EPA CASE NO.: 18463 LAB: COMPUCHEM LABO VOLATILES Sample ID No. Traffic Report No. Matrix Units Dilution Factor Percent Moisture Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane 1,2-Dichloroethene (total) Chloroform 1.2-Dichloroethane 2-Butanone 1.1.1-Trichloroethane Carbon Tetrachloride **Bromodichloromethane** 1.2-Dichloropropane cis-1.3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methy1-2-Pentanone 2-Hexanone Tetrach oroethene Toluene 1.1.2.2-Tetrachloroethane Chlorobenzene **Ethyl benzene** Styrene Xylenes (Total) Blank space - compound analyzed for but not detected B - compound found in lab blank as well as sample, indicates possible/probable blank contamination E - estimated value J - estimated value, compound present below CRQL but above IDL R - analysis did not pass EPA QA/QC N - Presumptive evidence of the presence of the material NR - analysis not required Detection limits elevated if Dilution

Factor >1 and/or percent moisture >0%

SITE NAME: SUFFOLK AIRPORT C & D SITE

Y071-TBLK2 BKF79 **AQUEOUS** UG/L 1.0 150 E 3 5 J 14 E

SITE NAME: SUFFOLK AIRPORT C & D SITE
PROJECT#: Y071
SAMPLING DATE: JULY 15-16, 1992
EPA CASE NO.: 18463 LAB: COMPUCHEM LABORATORIES

SEMI-VOLATILES Sample ID No. Traffic Report No. Matrix Units Dilution Factor/GPC Cleanup (Y) Percent Moisture	 Y071-GW1 BKF41 AQUEOUS UG/L 1.0	Y071-GW2 BKF42 AQUEOUS UG/L 1.0	Y071-S1 BKF56 S01L UG/KG 1.0 2	Y071-S2 BKF57 S01L UG/KG 1.0 2	Y071-S3 BKF58 S01L UG/KG 1.0 3	Y071-S4 BKF59 S0IL UG/KG 1.0 5	Y071-S5 BKF60 SOIL UG/KG 1.0 5	Y071-S6 BKF61 S0IL UG/KG 1.0 8	Y071-S7 BKF62 S01L UG/KG 1.0 8	Y071-SW1 BKF49 AQUEQUS UG/L 1.0
Phenol bis(2-Chloroethyl)ether 2-Chlorophenol									64 B	ນ
1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	-							e .		
2-Methylphenol 2,2'-Oxybis(1-Chloropropane) 4-Methylphenol				57 J			•			
N-Nitroso-di-n-dipropylamine Hexachloroethane Nitrobenzene				:				•		
Isophorone 2-Nitrophenol 2,4-Dimethylphenol										
bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene								•		
Naphthalene 4-Chloroaniline Hexachlorobutadiene				160 J		36 J				
4-Chloro-3-Methylphenol 2-Methylnaphthalene Hexachlorocyclopentadiene		•		340 E						
2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene										•
2-Nitroaniline 2-Nitroaniline Dimethylphthalate Acenaphthylene	1 J			•		45 J	41 J			
2,6-Dinitrotoluene 3-Nitroaniline Acenaphthene										
2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran		•								
2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenyl ether										·
Fluorene 4-Nitroaniline 4.6-Dinitro-2-methylphenol					•				·	
N-nitrosodiphenylamine 4-Bromophenyl-phenyl ether Hexachlorobenzene										
Pentachlorophenol Phenanthrene Anthracene				37 J		570 E 72 J	590 E 52 J 43 J		200 J	
Carbazole Di-n-butylphthalate	2 J					49 J	43 J			

SITE NAME: SUFFOLK AIRPORT C & D SITE PROJECT#: Y071 SAMPLING DATE: JULY 15-16, 1992

SEME HOLATTIES

EPA CASE NO.: 18463 LAB: COMPUCHEM LABORATORIES

SEMI-VOLATILES Sample ID No. Traffic Report No. Matrix Units Dilution Factor/GPC Cleanup (Y) Percent Moisture	Y071-GW1 BKF41 AQUEOUS UG/L 1.0	Y071-GW2 BKF42 AQUEOUS UG/L 1.0	Y071-S1 BKF56 S0IL UG/KG 1.0 2	Y071-S2 BKF57 S0IL UG/KG 1.0 2	Y071-S3 BKF58 S0IL UG/KG 1.0	Y071-S4 BKF59 S01L UG/KG 1.0 5	Y071-S5 BKF60 S01L UG/KG 1.0	Y071-S6 BKF61 S0IL UG/KG 1.0 8	Y071-S7 BKF62 SOIL UG/KG 1.0 8	YO71-SWI BKF49 AQUEOUS UG/L 1.0
Fluoranthene Pyrene Butylbenzylphthalate				42 81))	1300 E 1400 BE	1000 E 1500 BE	34000 E	420 E 300 B	J
Butylerizylphiciatate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene bis(2-Ethylhexyl)phthalate				140 .	j	710 E 700 E	820 E 700 E		170 J 160 J	
Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene				110	J	1400 EN 1400 EN 520 E	1100 EI 460 E		320 J 320 J 120 J	
Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene				64 . 67 .		450 E 150 J 630 E	370 E 130 J 550 E		140 J 160 J	

NOTES:

Blank space - compound analyzed for but not detected

not detected

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E - estimated value

J - estimated value, compound present below CRQL but above IDL

R - analysis did not pass EPA QA/QC

N - Presumptive evidence of the presence of the material

of the material

NR - analysis not required Detection limits elevated if Dilution Factor >1 and/or percent moisture >0%

SITE NAME: SUFFOLK AIRPORT C & D SITE PROJECT#: Y071 SAMPLING DATE: JULY 15-16, 1992 EPA CASE NO.: 18463 LAB: COMPUCHEM LABO

Sample ID No. Traffic Report No. Matrix		
Units Dilution Factor/GPC Percent Moisture	Cleanup	(Y)

Y071-SW2 Y071-SW3 Y071-SW4 Y071-SED1 BKF50 BKF51 BKF52 BKF53 AQUEOUS AQUEOUS SOIL UG/L UG/L UG/KG 1.0 1.0 1.0 6	Y071-SED2 BKF54 S0IL UG/KG 1.0 7	Y071-SED3 BKF55 SOIL UG/KG 1.0 8	Y071-RIN4 BKF77 AQUEOUS UG/L 1.0	Y071-RIN5 BKF43 AQUEOUS UG/L 1.0	Y071-RIN6 BKF44 AQUEOUS UG/L 1.0
---	---	---	--	--	--

3 BJ

Phenol
bis(2-Chloroethyl)ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene 1.2-Dichlorobenzene 2-Methylphenol
2,2'-Oxybis(1-Chloropropane)
4-Methylphenol N-Nitroso-di-n-dipropylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline 4-Chloroaniline
Hexachlorobutadiene
4-Chloro-3-Methylphenol
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline Dimethylphthalate Acenaphthylene 2.6-Dinitrotoluene 3-Nitroaniline Acenaphthene 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2.4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenyl ether Fluorene 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-nitrosodiphenylamine 4-Bromophenyl-phenyl ether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Carbazole Di-n-butylphthalate

1 BJ

SITE NAME: SUFFOLK AIRPORT C & D SITE PROJECT#: Y071
SAMPLING DATE: JULY 15-16, 1992
EPA CASE NO.: 18463 LAB: COMPUCHEM

SEMI-VOLATILES

Sample ID No.

LAB: COMPUCHEM LABO

Traffic Report No. Matrix Units Dilution Factor/GPC Cleanup (Y) Percent Moisture	
Fluoranthene Pyrene Butylbenzylphthalate 3,3 -Dichlorobenzidine Benzo(a)anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	

Blank space - compound analyzed for but not detected

B - compound found in lab blank as well as sample, indicates possible/probable blank contamination

E - estimated value

J - estimated value, compound present below CRQL but above IDL R - analysis did not pass EPA QA/QC N - Presumptive evidence of the presence of the material

NR - analysis not required Detection limits elevated if Dilution Factor >1 and/or percent moisture >0%

Y071-SED1 Y071-SED2 Y071-SED3 BKF53 BKF54 BKF55 SOIL SOIL SOIL Y071-SW2 BKF50 AQUEOUS Y071-SW4 BKF52 AQUEOUS Y071-RIN4 Y071-RIN5 Y071-RIN6 BKF77 BKF43 BKF44 Y071-SW3 BKF51 BKF43 AQUEOUS UG/L AQUEOUS UG/L AQUEOUS UG/L **AQUEOUS** ÙG/L 1.0 ÛG/L ÚG/L UG/KG UG/KG UG/KG 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 6 8

> 11 BE 8 BJ 13 BE

SITE NAME: SUFFOLK AIRPORT C & D SITE PROJECT#: Y071 SAMPLING DATE: JULY 15-16, 1992 EPA CASE NO.: 18463 LAB: COMPUCHEM LABORATORIES

PESTICIDES Sample ID No. Traffic Report No. Matrix Units Dilution Factor/GPC Cleanup (Y) Percent Moisture	Y071-GW1 BKF41 AQUEOUS UG/L 1.0	Y071-GW2 BKF42 AQUEOUS UG/L 1.0	Y071-S1 BKF56 S0IL UG/KG 1.0Y 2	Y071-S2 8KF57 S0IL UG/KG 1.0Y 2	Y071-S3 BKF58 S0IL UG/KG 1.0Y 3	Y071-S4 BKF59 S0IL UG/KG 5.0Y	Y071-S5 BKF60 S0IL UG/KG 5.0Y	Y071-S6 BKF61 S0IL UG/KG 2000Y 8	Y071-S7 BKF62 SOIL UG/KG 1.0Y 8	Y071-SW1 BKF49 AQUEOUS UG/L 1.0
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor					R				0.086 J	N
Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4'-DDE Endrin	·		R .	R	0.96 JN	8.5 JN 670 E	13 E 680 E		R	
Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Methoxychlor			R R						R	
Endrin ketone Endrin aldehyde alpha-Chlordane gamma-Chlordane Toxaphene			R	0.28 J	0.17 J 0.52 JN	7.4 E	71 E		1.1 J 0.66 J	
Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254				90 E		9700 E	9300 E	6000000 E	51 E	N
Aroctor-1254 Aroctor-1260				30 L	48 E	5,00 £	5500 £	0000000 L	5. L	·•

NOTES:

NOTES:
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B - compound found in lab blank as well as sample, indicates possible/probable blank contamination
E - estimated value
J - estimated value, compound present below CRQL but above IDL
R - analysis did not pass EPA QA/QC
N - Presumptive evidence of the presence of the material
NR - analysis not required
Detection limits elevated if Dilution Factor >1 and/or percent moisture >0%

SITE NAME: SUFFOLK AIRPORT C & D SITE PROJECT#: Y071 SAMPLING DATE: JULY 15-16, 1992 EPA CASE NO.: 18463 LAB: COMPUCHEM LABO

PESTICIDES Sample ID No. Traffic Report No. Matrix Units Dilution Factor/GPC Cleanup (Y) Percent Moisture	Y071-SW2 BKF50 AQUEOUS UG/L 1.0	Y071-SW3 BKF51 AQUEOUS UG/L 1.0	YQ71-SW4 BKF52 AQUEQUS UG/L 1.0	Y071-SED1 BKF53 S0IL UG/KG 1.0Y 6	Y071-SED2 BKF54 S0IL UG/KG 1.0Y 7	Y071-SED3 BKF55 SOIL UG/KG 1,0Y 8	Y071-RIN4 BKF77 AQUEOUS UG/L 1,0	Y071-RIN5 BKF43 AQUEOUS UG/L 1.0	Y071-RIN6 BKF44 AQUEQUS UG/L 1.0
alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Heptachlor	R	0.0032 J	0.0026 J	·	0.69 JN R	R			
Aldrin Heptachlor epoxide Endosulfan I Dieldrin 4,4 -DDE Endrin		R		11 1.3 J	1.2 J 0.52 JN 1.7 J R	0.060 JN			
Endosulfan II 4,4-DDD Endosulfan sulfate 4,4-DDT Metnoxychlor Endrin ketone	R		·	R	4.3 R	R			
Endrin aldehyde alpha-Chlordane gamma-Chlordane Toxaphene Aroclor-1016 Aroclor-1221				0.13 JN	R				
Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260						28 J			

NOTES:
Blank space - compound analyzed for but not detected
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J - estimated value, compound present below CRQL but above IDL
R - analysis did not pass EPA QA/QC
N - Presumptive evidence of the presence of the material
NR - analysis not required
Detection limits elevated if Dilution
Factor >1 and/or percent moisture >0%

SITE NAME: SUFFOLK C&D AIRPORT
PROJECT#: Y071
SAMPLING DATE: JULY 15-16, 1992
EPA CASE NO.: 18463
LAB NAME: CHESTER LABNET, KEYSTONE - MONRO

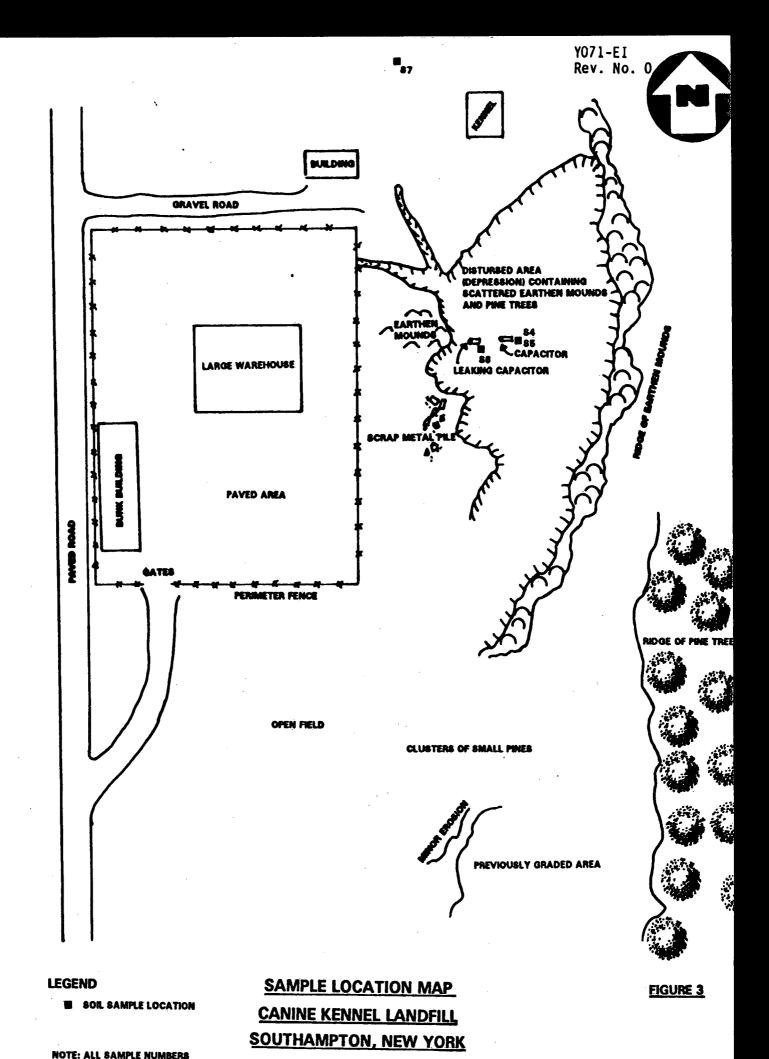
INORGANICS Sample ID No. Traffic Report No. Matrix Units	Y071-RIN5 MBHT43 AQUEOUS UG/L	Y071-RING MBHT44 AQUEOUS UG/L	Y071-SW1 MBHT49 AQUEOUS UG/L	Y071-SW2 MBHT50 AQUEOUS UG/L	Y071-SW3 MBHT51 AQUEDUS UG/L	Y071-SW4 MBHT52 AQUEOUS UG/L	Y071-SED1 MBHT53 SOIL MG/KG	Y071-SED2 MBHT54 SOIL MG/KG	Y071-SED3 MBHT55 SOIL MG/KG	
A) umi num		69.2 J	81.9 J	289	587	379	4370	722	207	
Antimony Arsenic Barium Beryllium		·	2 J 12.3 J	9.4 J	20.4 J	18.1 J	4.3 4.8 J	0.7 J 24.7 J	0.29 J 0.94 J	
Cadmium Calcium Chromium Cobalt	44.1 J 6.9 J	2.3 J 73.6 J 6.2 J	142000	2820 J 18.3 3.3 J	2010 J 15.8 2.4 J	1960 J 5.5 J 2 J	246 J 5.2 1.3 J	2.1 J	39.4 J 0.99 J	
Copper Iron Lead	11.6 J 46.5 J	15.1 J 67.9 J 2 J	368 3.4 E	8.3 J 502 4.8 E	7.1 J 2140 5.5 E	5.1 J 1640 3.8 E	10.6 E 4240 38.7	10.6 E 832 34.6	175 R	
Magnesium Manganese	2.3 J	2.5 J	466000 282	1580 J 45.9	1560 J 137	1490 J 130	536 J 32.9	188 J 39.4	11.4 J 3.8 J	
Mercury Nickel Potassium Selenium	0.47 12.3 J	14.2 J	136000	940 J	9.1 J 583 J	452 J	3.6 J 209 J	0.35 J		
Silver Sodium	52 J	299 J	3700000	1.7 J 4370 J	4520 J	4430 J	861 J	0.46 J		
Thallium Vanadium Zinc	11.2 J	28.1	6.7 J 14.9 J	3.7 J 25.5	5.6 J 30.5	3.9 J 19.4 J	8.3 J R		1.1 J	

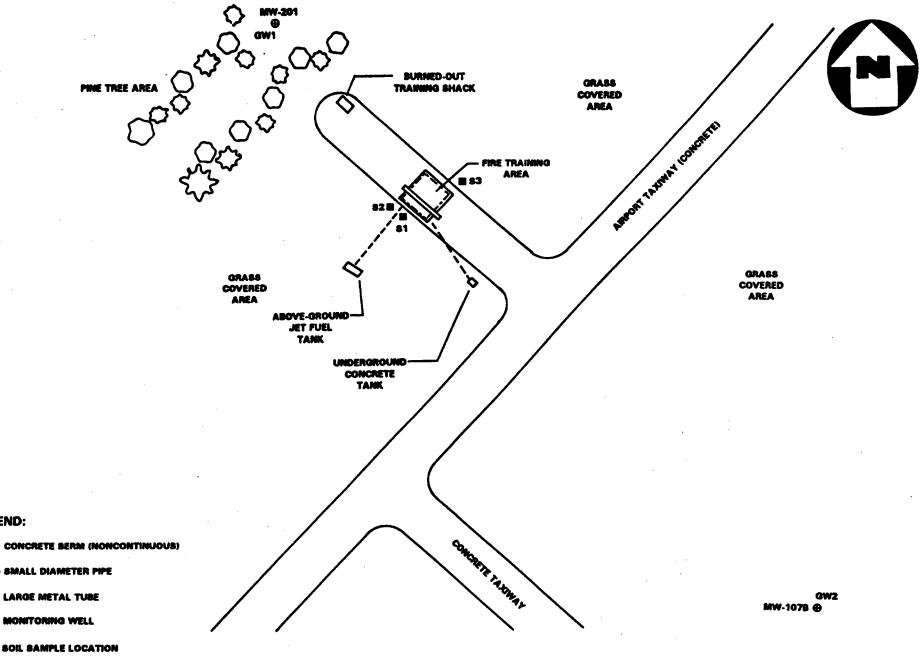
NOTES:
Blank space - compound analyzed for but not detected
E - estimated value
J - estimated value, compound present below CRDL but above IDL
R - analysis did not pass EPA QA/QC
NR - analysis not required

SITE NAME: SUFFOLK C&D AIRPORT
PROJECT#: Y071
SAMPLING DATE: JULY 15-16, 1992
EPA CASE NO.: 18463
LAB NAME: CHESTER LABNET, KEYSTONE - MONROEVILLE

INORGANICS Sample ID No. Traffic Report No. Matrix Units	Y071-GW1 MBHT41 AQUEDUS UG/L	Y071-GW2 MBHT42 AQUEOUS UG/L	Y071-S1 MBHT56 SOIL MG/KG	Y071-S2 MBHT57 SOIL MG/KG	Y071-S3 MBHT58 SOIL MG/KG	Y071-S4 MBHT59 SOIL MG/KG	Y071-S5 MBHT60 SOIL MG/KG	Y071-S6 MBHT61 SOIL MG/KG	Y071-S7 MBHT62 SOIL MG/KG	Y071-RIN4 MBHT77 AQUEOUS UG/L
Aluminum	389	207	2580	3240	3620	1160	1160	1460	3570	
Antimony Arsenic Barium	18.5 J	8.6 J	1.1 J 29.2 J	1.3 J 21.3 J	1.1 J 25.4 J	0.74 J 2.1 J	0.6 J 2.1 J	1.1 J 4.2 J	1.2 J 21 J	
Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium	6760 R 2 J 14.7 J R 4.3 E 3520 J 64.4	3730 J R 5.3 J R 3.2 E 2220 J 45.7	35 J 9.9 0.96 J 8.4 E 5710 86.3 160 J 25.1	1.2 793 J 14.3 0.93 J 19.4 E 3970 173 495 J 18.4	1.1 873 J 21.9 4.3 J 35.8 E 31900 70 306 J 144	213 J 2.5 0.63 J 2 J 1330 7.9 E 153 J 13.8	60.3 J 2.1 2.2 J 1210 5.5 74.7 J 13.2	48.1 J 3.2 0.6 J 9.2 E 3130 12.2 88.2 J 18	0.46 J 326 J 5.5 1.9 J 4.7 J 4800 10.1 949 J 94.8	50.5 J 54.3 2.1 J 10.5 J 390
Manganese Mercury Nickel Potassium	16.9 J 881 J	435 J	2.9 J	2.3 J 127 J	15.8 95.2 J	20.0			3.5 J 599 J	23.1 J
Selenium Silver Sodium Thallium	1.8 J 5110	4030 J		18 J	0.75 J 25.4 J		14 J	7.8 J	23.4 J	50.9 J
Thallium Vanadium Zinc	2.1 J 864	593	5.3 J R	8.6 J 70.8	8.6 J 39	3.1 J R	2.9 J R	3.9 J R	10.5 J R	

NOTES:
Blank space - compound analyzed for but not detected
E - estimated value
J - estimated value, compound present below CRDL but above IDL
R - analysis did not pass EPA QA/QC
NR - analysis not required





NOTE: ALL SAMPLE NUMBERS PRECEDED BY YO71-.

GROUNDWATER SAMPLE LOCATION

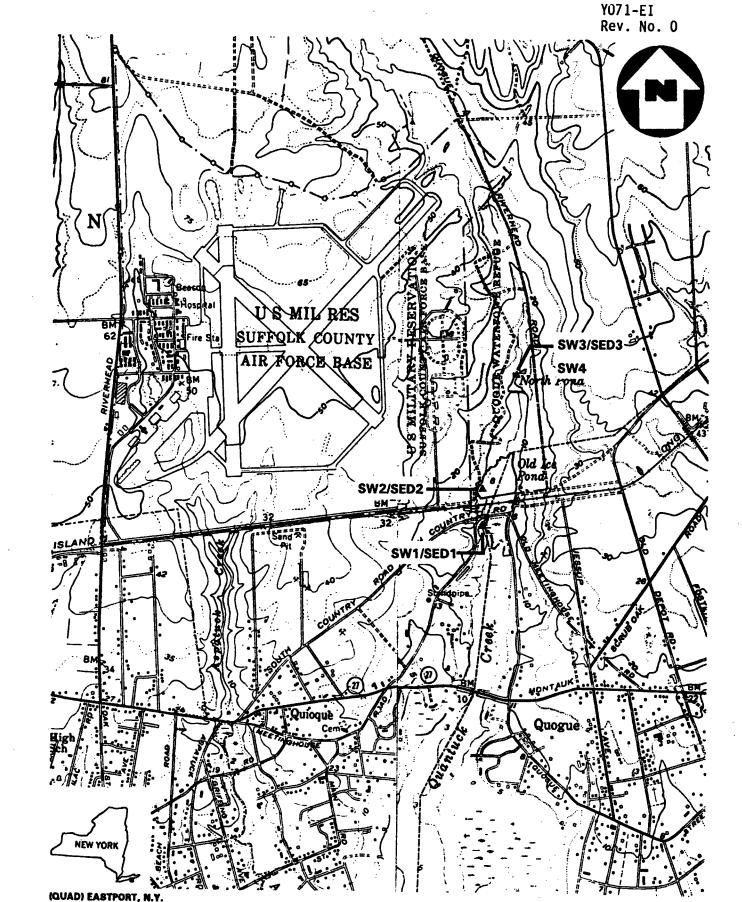
LEGEND:

SAMPLE LOCATION MAP
SUFFOLK COUNTY AIRPORT TRAINING AREA
SOUTHAMPTON, N.Y.

ADDROYMATE SCALE: 1"= 150"

FIGURE 4

Rev. No. (



LEGEND:

A SURFACE WATER/
SEDIMENT SAMPLE LOCATION

OFF-SITE SAMPLE LOCATION MAP

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, N.Y.

FIGURE 6

NOTE: ALL SAMPLE NUMBERS PRECEDED BY YO71-.

PART IV: HAZARD ASSESSMENT

GROUNDWATER ROUTE

1. Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence.

There is a very high potential for a release to groundwater to have occurred. Volatile organic contaminants (VOCs) were found in soil and groundwater samples collected at the Fire Training Area (FTA). Contaminants attributable to to this waste source were found in downgradient monitoring wells on three different occasions but not in upgradient monitoring wells. However, supporting documentation concerning quality assurance/quality control data is not currently complete. Solvents containing the same contaminants found in groundwater are known to have been burned at the FTA. The FTA was used for 18 years before a concrete curb was installed around the burn pit. However, a recent inspection noted that it did not completely surround it. There is also a potential to release from other waste sources at the site. Various VOCs, semivolatile organic compounds, and metals were found in soil samples collected near drums and other wastes at the Runway Disposal Area, and soil samples collected near capacitors at the Canine Kennel Landfill were found to contain a PCB. No containment measures are known to have been used with regard to the latter two waste sources. Numerous VOCs were also found in sludge and liquid samples collected from the Septic Tank/Cesspool Systems located at the ANG base. Some cesspools were constructed of perforated concrete; others had bottoms open to the soil. Finally, the Former and Current Hazardous Waste Storage Facilities were both used to store various shopwastes, including solvents. No containment structures were used, and visual observations indicate that spills have occurred.

Ref. Nos. 8, pp. 3-8, 5-2, 5-8, 5-9, 5-11, 5-30, 6-10, 6-12, 6-13, I-1; 10, pp. 2-2 to 2-5, 3-1, Table 2; 31, 32; 34-38; 41, pp. 2-1, 2-3, 2-4, 3-2, 3-3

2. Describe the aquifer of concern; include information such as depth, thickness, geologic composition, areas of karst terrain, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.

The aquifer of concern is the surficial, unconfined Upper Glacial aquifer, which generally consists of highly permeable glaciofluvial and glaciodeltaic deposits, composed primarily of sands and gravels with trace amounts of clayey glacial till and lacustrine clay. Borings drilled at the site indicate that locally this aquifer consists of stratified fine to coarse sands and gravels. The Upper Glacial aquifer is approximately 120 feet thick near the site, and groundwater within this formation flows southeast toward the headwaters of Quantuck Creek. The average hydraulic conductivity (in the vicinity of the Fire Training Area) is 3.5x10⁻² cm/sec.

Ref. Nos. 7; 8, pp. 5-6, 5-8, 6-7, 6-8; 13; 15

3. Is a designated well head protection area within 4 miles of the site?

All primary aquifers on Long Island are considered designated well head protection areas.

Ref. No. 9

4. What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?

Cesspools excavated at the Air National Guard Base were found at depths of 25 feet. The water table was determined to be 30.8 feet below the ground surface in piezometer P-1; therefore, the depth from the lowest point of waste disposal/storage to the saturated zone of the Upper Glacial aquifer is 5.8 feet.

Ref. Nos. 8, pp. 5-9, B-2-25; 10, p. 2-2

5. What is the permeability value of the least permeable continuous intervening stratum between the ground surface and the aquifer of concern?

Between the ground surface and the Upper Glacial aquifer are deep (60 inches), excessively well-drained, fine- to coarse-textured loamy sands. Loamy sands have a permeability of approximately 10⁻⁴ centimeters per second.

Ref. Nos. 8, p. 5-5; 11, p. 2-6; 12, p. 51601

6. What is the distance to and depth of the nearest well that is currently used for drinking purposes?

Supply well No. 19 of the Suffolk County Water Authority (SCWA) Meeting House Road well field lies 0.23 miles south of the Runway Dispoal Area portion of the site. There are 12 wells at this well field, averaging 40 to 50 feet in depth.

Ref. Nos. 5-7, 14

7. If a release to groundwater is observed or suspected, determine the number of people that obtain drinking water from wells that are documented or suspected to be located within the contamination boundary of the release.

There is a very strong potential for a release of contaminants to goundwater. However, the nearest wells, located 0.23 mile south of the site at the SCWA Meeting House Road well field, are sampled quarterly and are not known to have been impacted.

Ref. Nos. 6, 14, 40

8. Identify the population served by wells located within 4 miles of the site that draw from the aquifer of concern.

Distance	Population
0 - ¼ mi	11,920
>¼ - ½ mi	23,840
>½ - 1 mi	0
>1 - 2 mi	14,900
>2 - 3 mi	0
>3 - 4 mi	0

State whether groundwater is blended with surface water or with groundwater from other wells. Also provide an explanation on how each ring population was determined.

Each SCWA well field is a blended system, and all SCWA groundwater systems are fully integrated throughout the county. The population served by each well was estimated based on the total population served by all wells owned by the SCWA.

Ref. Nos. 5-7, 13-15

9. Identify uses of groundwater within 4 miles of the site (i.e. private drinking source, municipal source, commercial, irrigation, unuseable).

Documented uses of groundwater include public supply and irrigation.

Ref. Nos. 6; 8, p. 6-10

SURFACE WATER ROUTE

10. Describe the likelihood of a release of contaminant(s) to surface water as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence.

A release of contaminants to surface water is not observed or suspected; however, there is a slight potential for a release to occur via overland flow or, more probably, via groundwater to surface water discharge. Volatile organic compounds (VOCs) were found in soil and groundwater samples collected at the Fire Training Area (FTA). Contaminants attributable to this waste source were found in downgradient monitoring wells on three different occasions but not in upgradient monitoring wells. Solvents containing the same contaminants as those found in these groundwater samples are known to have been burned at the FTA. The FTA was used for 18 years before a concrete curb was installed around the burn pit. However, a recent inspection noted that it did not completely surround it.

Various VOCs, semivolatile organic compounds, and metals were found in soil samples collected near drums and other wastes at the Runway Disposal Area, and soil samples collected near capacitors at the Canine Kennel Landfill were found to contain a PCB. No containment measures are known to have been used with regard to these latter two waste sources.

Numerous VOCs were found in sludge and liquid samples collected from the Septic Tank/Cesspool Systems located at the ANG base. Some cesspools were constructed of perforated concrete; others had bottoms open to the soil. Finally, the Former and Current Hazardous Waste Storage Facilities were both used to store various shop wastes, including solvents. No containment structures were used, and visual observations indicated that spills have occurred.

Surficial deposits at the site consist of highly permeable sands and gravels, and groundwater flow is southeast toward the Quantuck Creek watershed, potentially enabling contaminants that have migrated vertically to the water table to be transported to nearby surface water bodies.

Ref. Nos. 8, pp. 5-8, 6-7, 6-8; 10, pp. 2-2 to 2-5, 3-1, Table 2; 11, p. 2-6; 12, p. 51601; 20; 31; 32; 34-38; 41, pp. 2-1, 2-3, 2-4, 3-2, 3-3; 42

11. Identify the nearest downslope surface water. If possible, include a description of possible surface drainage patterns from the site.

The in-water segment of the surface water migration pathway begins in an unnamed stream, located 0.26 mile east-southeast of the Canine Kennel Landfill, that flows into Old Ice Pond. An unnamed stream drains Old Ice Pond into Quantuck Creek, which flows into Quantuck Bay. Quantuck Bay is connected to Moriches Bay to the west and Shinnecock Bay to the east by Quantuck Canal and Quogue Canal, respectively. The 15-mile migration path then ends west of Moriches Bay in Narrow Bay and north of Shinnecock Bay in Great Peconic Bay. The inwater segment also forks out into the Atlantic Ocean through inlets leading from Moriches Bay and Shinnecock Bay. A separate prong of the same watershed begins south of the Air National Guard portion of the site with Aspatuck Creek, which discharges into the Aspactuck River. The Aspatuck River empties into Quantuck Bay.

Ref. Nos. 14, 17

12. What is the distance to the nearest downslope surface water? Measure the distance along a course that runoff can be expected to follow.

The nearest downslope surface water is Old Ice Pond, located approximately 875 feet east of the Suffolk Airport C&D portion of the site. There are no obvious drainage paths between the site and Old Ice Pond.

Ref. Nos. 14, 17

13. Determine the type of floodplain that the site is located within.

The site is in an area of minimal flooding.

Ref. No. 16

14. Identify drinking water intakes in surface waters within 15 miles downstream of the site. For each intake identify: the distance from the point of surface water entry, population served, and stream flow at the intake location.

Intake Distance Population Served Flow (cfs)

There are no drinking water intakes within 15 miles downstream of the site. The surface water bodies along the migration pathway consist of small streams, a pond within a wildlife refuge, and saline coastal tidal waters.

Ref. No. 14

15. Identify fisheries that exist within 15 miles downstream of the point of surface water entry.

For each fishery specify the following information:

Fishery Name	Water Body Type	Flow (cfs)	Saline/Fresh/Brackish
Quantuck Bay	Coastal Tidal Waters	Not applicable	Saline
Shinnecock Bay	Coastal Tidal Waters	Not applicable	Saline
Moriches Bay	Coastal Tidal Waters	Not applicable	Saline
Great Peconic Bay	Coastal Tidal Waters	Not applicable	
Atlantic Ocean	Shallow/Moderate Ocean Zone	Not Applicable	Saline

Ref. Nos. 2; 12, p. 51615; 20; 39; 40; 43

16. Identify sensitive environments that exist within 15 miles of the point of surface water entry. For each sensitive environment specify the following:

Environment	Water Body Type	Flow (cfs)	Wetland/Frontage(miles)
Unnamed Stream #1 Wetland	Minimal Stream	2.4	0.3
Unnamed Stream #2 Wetland	Minimal Stream	2.4	0.2
Quantuck Creek Wetlands	Coastal Tidal Waters	Not applicable	1.6
Aspatuck Creek Wetlands	Minimal Stream	Unknown	0.8
Aspatuck River Wetlands	Coastal Tidal Waters	Not applicable	1.6
Quantuck Bay Wetlands	Coastal Tidal Waters	Not applicable	1.5
Quantuck Canal Wetlands	Coastal Tidal Waters	Not applicable	1.0
Quogue Canal	Coastal Tidal Waters	Not applicable	1.0
Wetlands Moriches Bay/	Coastal Tidal Waters	Not applicable	13.0
Narrow Bay Wetlands Shinnecock Bay Wetlands	Coastal Tidal Waters	Not applicable	11.9

Great Peconic Bay

Coastal Tidal Waters Not applicable

0.4

Wetlands

Coastal Barrier

Coastal Tidal Waters Not applicable

Not applicable

(partially developed)

Fire Island National

Coastal Tidal Waters Not applicable

Not applicable

Seashore

Ref. Nos. 18, 20, 26

If a release to surface water is observed or suspected, identify any intakes, fisheries, and 17. sensitive environments from question Nos. 14-16 that are or may be located within the contamination boundary of the release.

A release of contaminants to surface water is not observed or suspected; see No. 10.

Intake: Not Applicable

Fishery: Not Applicable

Sensitive Environment: Not Applicable

Ref. No. 38

SOIL EXPOSURE PATHWAY

18. Determine the number of people that occupy residences or attend school or day care on or within 200 feet of the site property.

There are no people that occupy residences or attend school or day care on or within 200 feet of the site.

Ref. Nos. 14, 21

19. Determine the number of people that work on or within 200 feet of the site property.

There are 500 to 600 employees on the airport grounds (i.e., the site property) that work mostly in the vicinity of the airport entrance, west of the runways. However, it is not likely that these employees work within 200 feet of soil contamination since the only areas where it most likely exists are located in the southeast corner of the airport property.

Ref. Nos. 1, 14, 22

20. Identify terrestrial sensitive environments on or within 200 feet of the site property.

The site lies within the boundaries of a unique biotic community known as the Central Suffolk Pine Barrens Zone. Portions of the site are also characterized by the presence of another unique biotic community known as the dwarf pine plains, which covers a total of 2,500 acres.

Ref. Nos. 3; 8, pp. 3-5, A-1-1, A-1-2

AIR ROUTE

21. Describe the likelihood of release of contaminants to air as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release define the supporting analytical evidence.

A release of contaminants to air is not observed or suspected. However, there is a slight potential for a release of contaminated particulates to the air. PCBs were detected in surface soil samples collected at the Canine Kennel Landfill in July 1992, and various volatile and semivolatile organic compounds were detected in surface soil collected at the Runway Disposal Area in February 1991. Volatile organic compounds were also detected in surface soil samples collected from the Fire Training Area in April 1987.

Ref. Nos. 8, p. 5-30; 32; 38

22. Determine populations that reside within 4 miles of the site.

Distance	Population
0 - ¼ mi	0
>¼ - ½ mi	0
>½ - 1 mi	570
>1 - 2 mi	4,860
>2 - 3 mi	4,620
>3 - 4 mi	5,870

Ref. Nos. 23-25

23. Identify sensitive environments and wetlands acreage within ½ mile of the site.

0 - 1/4 mile

1/4 - 1/2 mile

Wetlands - 22 acres

Sensitive Environments/Wetland Acerage Sensitive environments/Wetland Acerage

Wetlands - 21 acres
Unique Biotic Community - Central Suffolk
Pine Barrens Zone
Unique Biotic Community - Dwarf Pine Plains

Ref. Nos. 3, 26

24. If a release to air is observed or suspected, determine the number of people that reside or are suspected to reside within the area of air contamination from the release.

A release to air not observed or suspected; see No. 21.

25. If a release to air is observed or suspected, identify any sensitive environments, listed in question No. 23, that are or may be located within the area of air contamination from the release.

A release to air is not observed or suspected; see No. 21.

This Report was conducted under the following USEPA Documentation Procedure

Guidance for Performing Site Inspections Under CERCLA Draft Publication 9345.1-0

ATTACHMENT 1

ATTACHMENT 2

REFERENCES

- 1. Telecon Note: Conversation between Mr. Latrenta, Suffolk Airport Aviation Division (SAAD), and J. Torchia, NUS Corp., May 9, 1991.
- 2. Telecon Note: Conversation between Mr. Briggs, New York State Department of Environmental Conservation (NYSDEC), and Thomas Varner, HALLIBURTON NUS Environmental Corporation, September 9, 1992.
- 3. Letter from Robert S. Deluca, Suffolk County Department of Health Services, to Joanne Torchia, NUS Corp., April 4, 1991.
- 4. Krulikas, R.K. Hydrogeologic Data from Selected Wells and Test Holes in Suffolk County, Long Island, New York, 1972-80. Open-File Report 81-500. U.S. Geological Survey, 1981.
- 5. Telecon Note: Conversation between Mrs. Mansey, Suffolk County Water Authority (SCWA), and Joanne Torchia, NUS Corp., July 15, 1991.
- 6. SCWA Distribution System Maps, Nos. 15G-15I, 16F-16H, 17G-17I, 18G-18I, revised 1990.
- 7. Telecon Note: Conversation between Laura Mansey, SCWA, and Thomas Varner, HALLIBURTON NUS Environmental Corporation, September 2, 1992.
- 8. Final Site Characterization Report, Installation Restoration Program, Suffolk County Airport Fire Training Area, Westhampton Beach, NY, Volumes I and II. E.C. Jordan Co., June 1989.
- 9. Telecon Note: Conversation between Audrey Moore, U.S. Environmental Protection Agency (EPA), Office of Groundwater Management, and Gerald J. Hanney, NUS Corp., November 6, 1990.
- 10. Installation Restoration Program Site Investigation Technical Memorandum, Interim Report of Findings for Cesspool/Septic Tank Survey; Field Screening Results. ABB Environmental Services, Inc., October 1, 1991.
- 11. Site Investigation Sampling and Analysis Plan, Suffolk County Air National Guard (ANG) Base, Suffolk County Airport, Westhampton Beach, New York. ABB Environmental Services, Inc., August 1991.
- 12. U.S. EPA Hazard Ranking System, Federal Register, Vol. 55, No. 241, December 14, 1990.
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- 15. Calculation Sheet: Population served by public supply wells within 4 miles of the site, by T. Varner, HALLIBURTON NUS Environmental Corporation, September 2, 1992.
- 16. Flood Insurance Rate Map, Town of Southampton, New York, Suffolk County, Community-Panel Number 365342 0024 C, Revised June 1, 1983.
- 17. Project Note: Analysis of aerial photographs, by T. Varner, September 9, 1992.

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- 18. Water Resources Data, New York, Water Year 1989. U.S. Geological Survey Water-Data Report NY-89-2.
- 19. Telecon Note: Conversation between Charles Guthery, NYSDEC, and J. Torchia, NUS Corp., May 15, 1991.
- 20. Fifteen-Mile Surface Water Migration Pathway Map, compiled from U.S. Department of the Interior Geological Survey Topographic Maps, 7.5 minute series, "Eastport Quadrangle, NY", 1956; "Quogue Quadrangle NY", 1956; "Mattituck Quadrangle, NY", 1956; "Shinnecock Inlet Quadrangle, NY", 1955; "Southampton Quadrangle, NY", 1956; "Moriches Quadrangle, NY", 1967; and "Pattersquash Island Quadrangle, NY", 1967.
- 21. Telecon Note: Conversation between Secretary, SAAD, and J. Torchia, NUS Corp., May 9, 1991.
- 22. Telecon Note: Conversation between Eileen Shelden, SAAD, and Joanne Torchia, NUS Corporation, April 24, 1991.
- 23. Perry, R.H. <u>ed.</u> Perry's chemical engineer's handbook. Sixth ed. New York, McGraw-Hill Book Company, 1984.
- 24. General Sciences Corporation, Graphical Exposure Modeling Systems (GEMS). Landover, Maryland, 1986.
- 25. Calculation Sheet: Estimate of residential population with 4 miles of the site, by T. Varner, HALLIBURTON NUS Environmental Corporation, September 10, 1992.
- 26. U.S. Department of the Interior, Fish and Wildlife Service Wetland Maps, "Eastport Quadrangle, NY"; "Quogue Quadrangle, NY"; "Mattituck Quadrangle, NY"; "Shinnecock Inlet Quadrangle, NY"; "Southampton Quadrangle NY"; "Moriches Quadrangle, NY"; and "Pattersquash Island Quadrangle, NY", based on aerial photographs taken 1980.
- 27. U.S. EPA Comprehensive Environmental Response, Compensation, and Liability Information System, List 8: Site/Event Listing, June 1, 1992.
- 28. Engineering Investigations at Inactive Hazardous Waste Sites, Phase 1 Investigation, Suffolk Airport C&D Site, Site No. 152076, Town of Southampton, New York. EA Science and Technology, June 1987.
- 29. U.S. Air Force Installation Restoration Program Phase I Records Search for Suffolk County Airport (Executive Summary and Addendum). Dames & Moore, July 31, 1987.
- 30. Calculation Sheet: Calculation of C&D Site Area, by T. Varner, September 11, 1992.
- 31. Field Notebook No. 0714, Suffolk Airport C&D Site, TDD No. 02-9008-04, Site Inspection, NUS Corp. Region 2 FIT, Edison, New Jersey, February 13, 1991.
- 32. U.S. EPA Contract Laboratory Program, Ceimic Corp. (organics analyses) and Betz Laboratories, Inc. (inorganic analyses), Case No. 15870, Laboratory Analysis form NUS Region 2 FIT Site Inspection conducted February 13, 1991.

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- 33. Engineering Investigations at Inactive Hazardous Waste Sites, Phase 1 Investigations, Suffolk Airport Canine Kennel, Site No. 152079, Town of Southampton, Suffolk County. EA Science and Technology, June 1987.
- 34. Field Notebook No. 022, Suffolk Airport C&D Site, Job No. Y071, On-Site Reconnaissance, HALLIBURTON NUS Environmental Corporation, Iselin, New Jersey, July 7, 1992.
- 35. Additional Investigation Work Plan for Phase II/IV-A Remedial Action Plan for the Fire Training Area, Installation Restoration Program for Suffolk County Airport Air National Guard Base, Westhampton Beach, long Island, New York. E.C. Jordan Co., November 1988.
- 36. Evaluation of 2-Butanone in Groundwater Samples, Suffolk Conty Air National Guard Base, Suffolk County Airport, Westhampton Beach, New York. ABB Environmental Services, Inc., March 1992.
- 37. Annotated Monitoring Well Location Map, Fire Training Area, Suffolk County Airport. E.C. Jordan Co., December 1989.
- 38. U.S. EPA Contract Laboratory Program, CompuChem Laboratories, Inc. (organic analyses) and Chester Labnet, Keystone Monroeville (inorganic analysis), Case No. 18463, Laboratory Analysis from HALLIBURTON NUS Environmental Corporation Expanded Site Inspection conducted July 15-16, 1992.
- 39. Briggs, Phillip T. The sport fisheries for winter flounder in several bays of Long Island. New York Fish and Game Journal, 12(1): 31-70, January 1965.
- 40. Telecon Note: Conversation between Steve Calabufo, SCWA, and Thomas Varner, HALLIBURTON NUS Environmental Corporation, July 14, 1992.
- 41. Site Investigation Project Managment Plan, Suffolk County Air National Guard Base, Suffolk County Airport, Westhampton Beach, New York. ABB Environmental Services, Inc., August 1991.
- 42. Versar Inc., Case No. SH 189, Laboratory analyses of samples collected by the NYSDEC on December 12 and 14, 1989.

ATTACHMENT 1

EXHIBIT A

PHOTOGRAPH LOG

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY

EXPANDED SITE INSPECTION: JULY 15-16, 1992

PHOTOGRAPH INDEX

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY JULY 15-16, 1992

ALL PHOTOGRAPHS TAKEN BY T. VARNER

Photo Number	<u>Description</u>	<u>Time</u>
1P-1	View of decontamination pad, looking southeast.	0948
1P-2	Photograph of N. Kides and R. Yaeger collecting sample Y071-GW1. (Note: No placard used for photograph)	1335
1P-3	Photograph of S. Okulewicz collecting sample Y071-S1. (Note: Date on placard is incorrect)	1612
1P-4	Photograph of S. Okulewicz collecting sample Y071-S2.	1627
1P-5	Photograph of N. Kides and R. Yaeger collecting sample Y071-GW2, looking southeast.	1643
1P-5A	Photograph of S. Okulewicz collecting sample Y071-S3.	1730
1P-6	Photograph of S. Okulewicz collecting samples Y071-S4 and Y071-S5.	1746
1P-7	Photograph of N. Kides collecting sample Y071-S6.	1755
1P-8	View looking southwest of two capacitors where samples Y071-S4/S5/S6 were taken.	1800
1P-9	Photograph of R. Yaeger collecting sample Y071-S7.	1810
1P-10	View of site looking south.	1812

PHOTOGRAPH INDEX (CONT'D)

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY JULY 15-16, 1992

ALL PHOTOGRAPHS TAKEN BY T. VARNER

Photo Number	<u>Description</u>	<u>Time</u>
1P-11	Photograph of R. Yaeger collecting sample Y071-SW1.	1105
1P-12	Photograph of unidentified egrets perched in a tree along western side of Quantuck Creek.	1107
1P-13, 14	Panoramic photographic sequence looking southeast to west-southwest in the vicinity of Quantuck Creek. (Note wetland area containing snags and nesting platform.)	1112
1P-15, 16	Continuation of panoramic photographic sequence looking southeast to west-southwest in the vicinity of Quantuck Creek. (Note wetland area containing snags and nesting platform.)	1112
1P-17	Photograph of R. Yaeger collecting sample Y071-SED1.	1117
1P-18	Photograph of N. Kides collecting sample Y071-SW2, looking east.	1145
1P-19	Photograph of N. Kides collecting sample Y071-SED2.	1150
1P-20	View of sampling location for Y071-SED2/SW2, looking west-northwest from south shore of Old Ice Pond. (Note mixing bowl held out as marker.)	1156
1P-21	Photograph of R. Yaeger collecting samples Y071-SW3 and Y071-SW4.	1243
1P-22	Photograph of R. Yaeger collecting sample Y071-SED3.	1246
1P-23	View of sampling location for Y071-SW3/SED3/SW4, looking north-northeast from discharge point along south shore of North Pond. (Note: Discharge control sluice in foreground)	1251

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SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY JULY 15-16, 1992

ALL PHOTOGRAPHS TAKEN BY T. VARNER

Photo Number	<u>Description</u>	<u>Time</u>
1P-24	View of stream which drains North Pond, located on opposite side of trail from the discharge control sluice, looking south from trail along south shore of North Pond.	1255
1P-25	Photograph of Quoque Wildlife Refuge sign which shows the layout of the park.	1315

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-1 July 15, 1992 View of decontamination pad, looking southeast.



1P-2 July 15, 1992
Photograph of N. Kides and R. Yaeger collecting sample Y071-GW1. (Note: No placard used for photograph)

0948

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-3 July 15, 1992 1612
Photograph of S. Okulewicz collecting sample Y071-S1.
(Note: Date on placard is incorrect)



1P-4 July 15, 1992 1627 Photograph of S. Okulewicz collecting sample Y071-S2.

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-5 July 15, 1992 1643
Photograph of N. Kides and R. Yaeger collecting sample Y071-GW2, looking southeast.



1P-5A July 15, 1992 1730 Photograph of S. Okulewicz collecting sample Y071-S3.

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-6 July 15, 1992
Photograph of S. Okulewicz collecting samples Y071-S4 and Y071-S5.



July 15, 1992 Photograph of N. Kides collecting sample Y071-S6.

1P-7

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-8 July 15, 1992 1800
View looking southwest of two capacitors where samples
Y071-S4/S5/S6 were taken.



July 15, 1992 Photograph of R. Yaeger collecting sample Y071-S7.

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-10 July 15, 1992 View of site looking south.

1812

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-11 July 16, 1992 1105 Photograph of R. Yaeger collecting sample Y071-SW1.



1P-12 July 16, 1992
Photograph of unidentified egrets perched in a tree along western side of Quantuck Creek.

1107

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-13, 14

July 16, 1992
Panoramic photographic sequence looking southeast to west-southwest in the vicinity of Quantuck Creek. (Note wetland area containing snags and nesting platform.)

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



containing snags and nesting platform.)

1P-15, 16

July 16, 1992
Continuation of panoramic photographic sequence looking southeast to west-southwest in the vicinity of Quantuck Creek. (Note wetland area

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-17 July 16, 1992 1117
Photograph of R. Yaeger collecting sample Y071-SED1.



1P-18 July 16, 1992 1145
Photograph of N. Kides collecting sample Y071-SW2, looking east.

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-19 July 16, 1992 1150 Photograph of N. Kides collecting sample Y071-SED2.



1P-20 July 16, 1992 1156
View of sampling location for Y071-SED2/SW2, looking west-northwest from south shore of Old Ice Pond.
(Note mixing bowl held out as marker.)

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-21 July 16, 1992
Photograph of R. Yaeger collecting samples Y071-SW3 and Y071-SW4.



July 16, 1992 1246 Photograph of R. Yaeger collecting sample Y071-SED3.

1P-22

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-23 July 16, 1992 1251
View of sampling location for Y071-SW3/SED3/SW4, looking north-northeast from discharge point along south shore of North Pond. (Note discharge control sluice in foreground.)

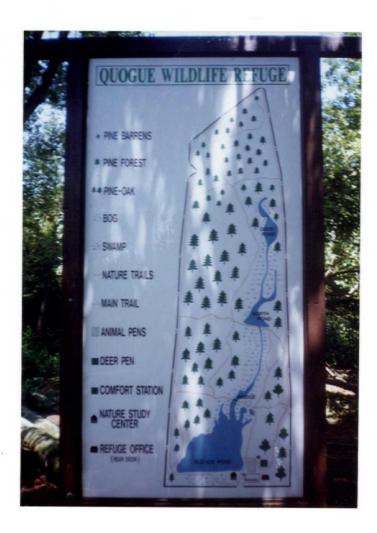
SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



1P-24 July 16, 1992
View of stream which drains North Pond, located on opposite side of trail from the discharge control sluice, looking south from trail along south shore of North Pond.

1255

SUFFOLK AIRPORT C&D SITE SOUTHAMPTON, NY



July 16, 1992 Photograph of Quoque Wildlife Refuge sign which shows the layout of the park.

ATTACHMENT 2